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2206.64630

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant:	Edward D. Brill
Serial No.:	09/855,989
Conf. No.:	9366
Filed:	05/15/2001
For:	VIBRATOR MOTOR
Art Unit:	3724
Examiner:	Jason D. Prone

I hereby certify that this paper is being deposited with the U.S. Postal Service as EXPRESS MAIL in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date.

01/12/07
Date

John Renzert
Express Mail No. EL965126530US

APPELLANTS' CORRECTED BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192

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Date: January 12, 2007

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Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is in support of Applicants' Notice of Appeal dated December 29, 2005 from the Final Rejection dated June 3, 2005, and has been amended in accordance with the Notification of Non-Compliant Appeal Brief dated December 15, 2006.

REAL PARTY IN INTEREST

The real party in interest in this case is Wahl Clipper Corporation, 2900 North Locust Street, Sterling, Illinois 61081.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences related to this application.

STATUS OF CLAIMS

Claims 1-22 are pending. Claims 15, 16 and 22 have been withdrawn.

STATUS OF AMENDMENTS

Amendment H and an RCE were mailed on August 30, 2005, after a Final Rejection mailed on June 3, 2005. Amendment H and the RCE were entered and considered in a non-final rejection mailed September 29, 2005.

SUMMARY OF CLAIMED SUBJECT MATTER

As described in claim 1, a vibrator motor 10 (Fig. 1) includes a stationary piece 12 having a plurality of laminations, and a moving piece 14 having a plurality of laminations (p. 8, lines 2-4). The moving piece 14 is hingedly secured to the stationary piece 12 by interlocking the moving piece laminations with the stationary piece laminations, so that the moving piece laminations and stationary piece laminations form a hinge 16 which secures the moving piece laminations to the stationary piece laminations (p. 8, lines 5-11).

Referring generally to claim 2, the vibrator motor has an electrical coil 25 and a movement control system 28 connected to the stationary piece 12 and the moving piece 14 (p. 9, lines 1-5, 12-13). The movement control system 28 has at least one spring 32 and at least one device 34 for adjusting tension in the spring 32 so that the moving piece 14 can be moved by electromagnetic fields generated by the electrical coil 25 (p. 9, lines 15-17).

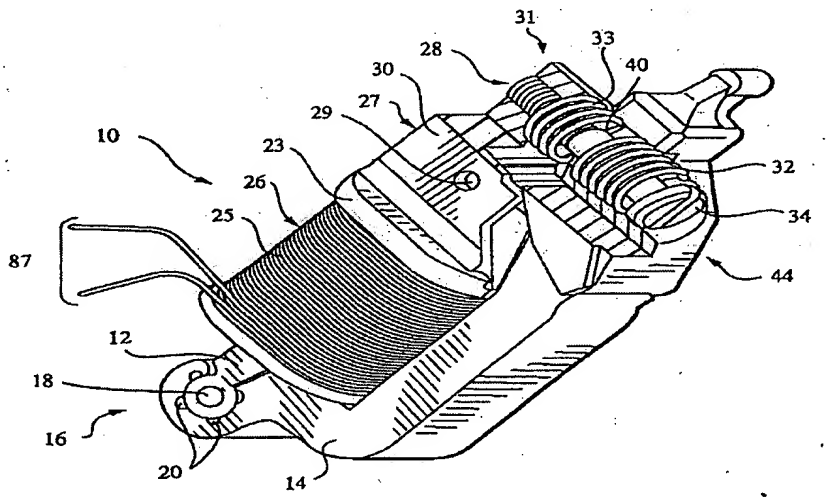


FIG. 1

In claim 3, the coil 25 is on the stationary piece 12 (through the bobbin 23) (p. 9, lines 1-5), and the motor 10 has a driver 44 on the moving piece 14 for connection to a motor load (p. 9, line 22 - p. 10, line 2; p.11, lines 11-12).

In claim 4, a hinge holder 60 (Fig. 7) has a first surface 62 that retains the moving piece 14 axially while still allowing the moving piece 14 to rotate (p. 10, line 16 - p. 11, line 2).

In claims 5 and 6, the hinge holder 60 (Fig. 7) has a second surface 72 that biases the moving piece 14 radially while still allowing the moving piece 14 to rotate (p. 11, lines 3-6).

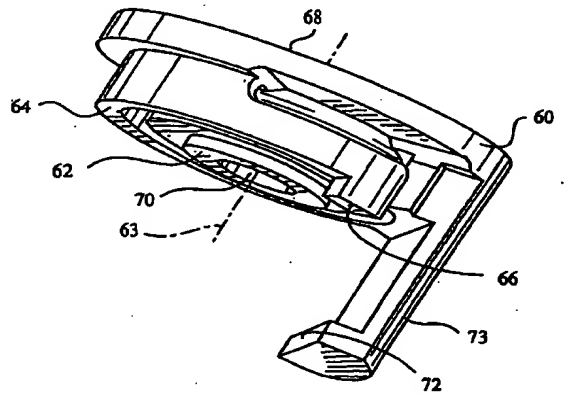


FIG. 7

In claim 7, the driver 44 is crimped to the moving piece 14 (p. 9, lines 21- p. 10, line 7).

In claim 8, the stationary piece 12 has a circular shape at a first end of the stationary piece 12, and the moving piece 14 forms a circular shaped opening at a first end of the moving piece 14. The circular shaped end of the stationary piece 12 fits inside of the circular shaped opening of the moving piece 14 (specification, p. 8, lines 5-11).

In claim 9, the movement control system 28 is located at a second end 31 (Fig. 1) of the moving piece 14 (p. 9, lines 12-13).

In claim 10, the movement control system 28 includes a screw 34 having screw threads and a head, the screw 34 being adjustably threaded in an opening 35 (Fig. 4) in the stationary piece (p. 9, lines 12-20). The screw 34 passes freely through an opening 50 (Fig. 6) in the drive member 44, (p. 10, lines 10-11), which is operatively connected to the moving piece 14 (p. 9, line 22- p. 10, line 2). The stationary piece opening 35 is located on one side of the moving piece opening 50 and the head of the screw 34 is located on the other side of the moving piece opening 50 (Fig. 1 and 3-6). The movement control system also has a first spring 33 between the stationary piece 12 (through the bobbin 23) and the moving piece 14 (through the drive member 44), and a second spring 32 between the moving piece 14 (drive member 44) and the head of the screw 34 (p. 9, lines 12-17, p. 10, lines 10-15).

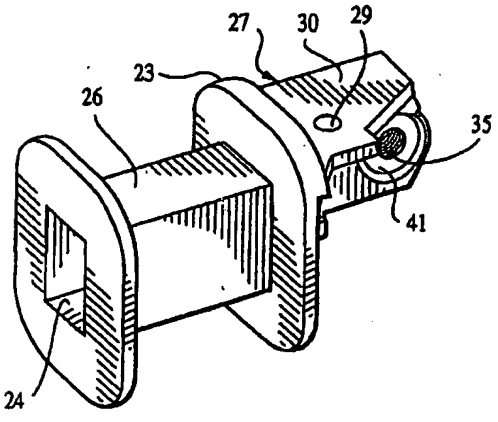


FIG. 4

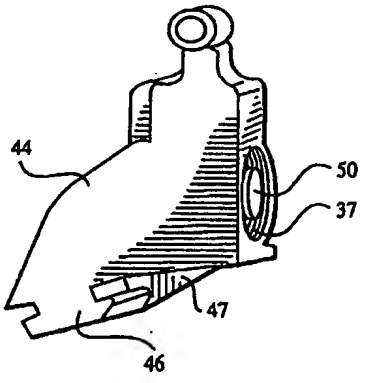


FIG. 6

In claim 11, a coil bobbin 23 is located on the stationary piece 12 around which the coil 25 is wound (p. 9, lines 1-6). The coil bobbin 23 also having an extension 27 (Fig. 3) to which the movement control system 28 is connected (p. 9, lines 7-8).

In claim 12, the movement control system 28 is connected to the driver 44 of the moving piece 14 (through the springs 32, 33) (p. 9, lines 12-17, p. 10, lines 10-15).

Claim 13 describes a low friction insert 19 (Fig. 2) between the stationary and moving pieces 12, 14 where the stationary and moving pieces 12, 14 are hinged (p. 8, lines 12-14).

In claim 14, at least one grease channel 20 is located where the moving piece 14 is hingedly secured to the stationary piece 12 (p. 8, lines 13-16).

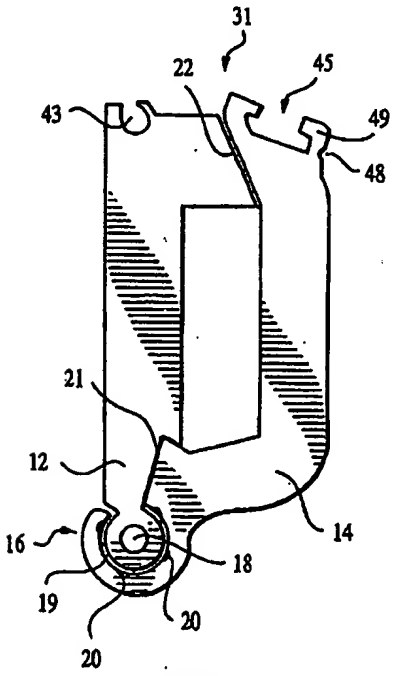


FIG. 2

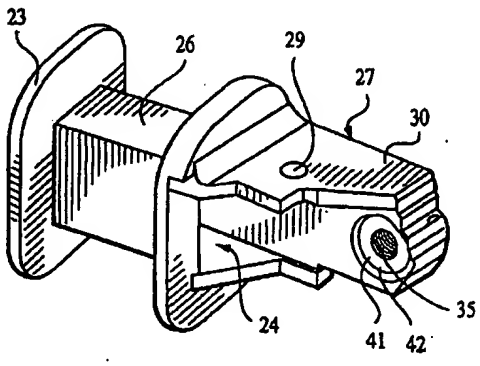


FIG. 3

In an embodiment described in claim 17, a hair clipper 80 (Fig. 9) has a case 82 having at least one attachment point 88, 90 (Fig. 10) for securing the motor 10, a stationary blade 84 on the case 82, and a moving blade 86 adjacent the stationary blade 84. The moving blade 86 is adapted for reciprocation across the moving blades 86 (p. 11, lines 7-17). The motor 10 of claim 1 is secured to the case 82 at the attachment point 88, 90 (p. 11, line 15, p. 12, line 8).

Claims 18-20 describe the hinge holder of claims 4-6, and claim 21 is similar to claim 11.

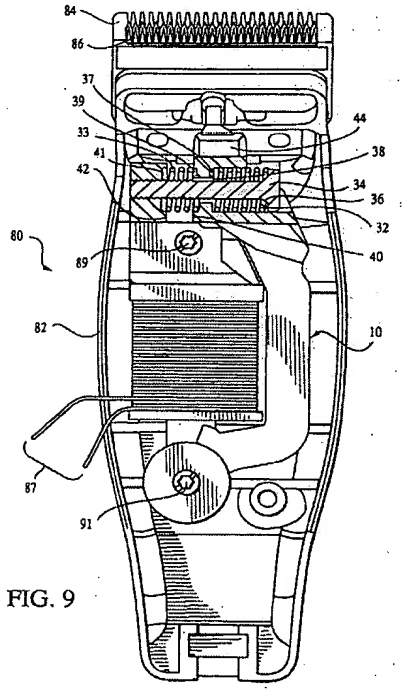


FIG. 9

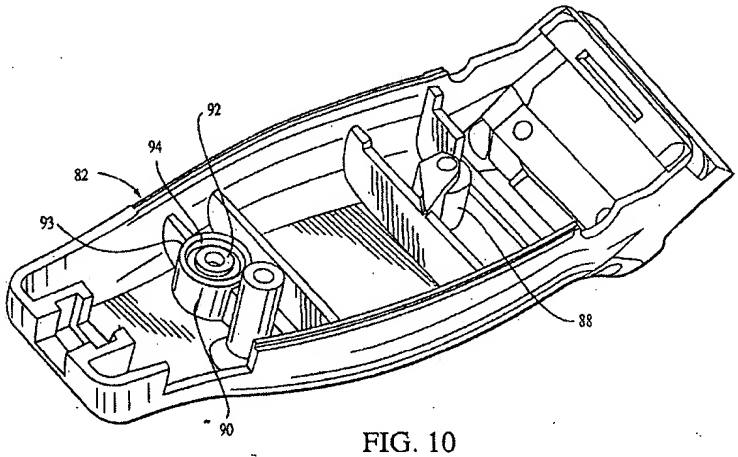


FIG. 10

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether independent claim 1 would have been obvious over Soultanian '092 and Pfenning '297, and more particularly, whether Pfenning '297 describes analogous prior art. Dependent claims 2-14, independent claim 17 and dependent claims 18-21 stand or fall with the independent claims.

ARGUMENT

Independent claim 1 stands rejected under § 103, on the basis of Soultanian '092 in view of Pfenning '297.

Fig. 1 of Soultanian '092 is shown below. Soultanian discloses a vibrator motor having stationary laminations and moving laminations. The examiner asserts that the

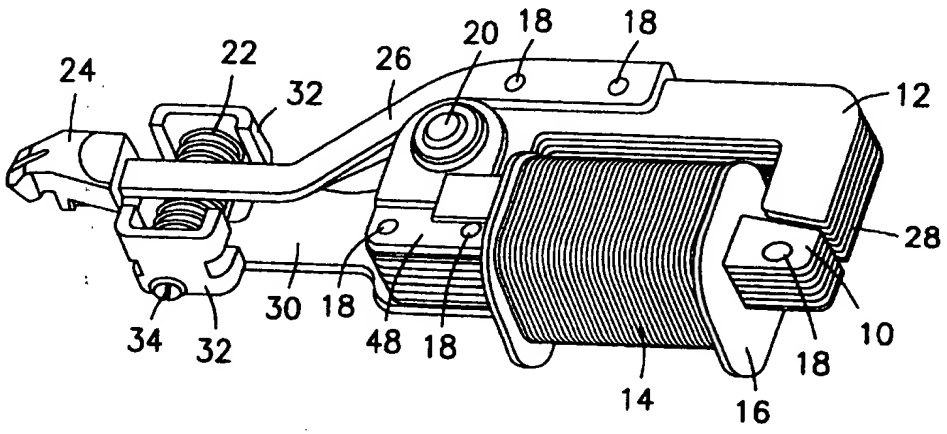


Fig. 1

moving piece is "hingedly secured" to the stationary piece by interlocking the moving piece laminations with the stationary piece laminations, but the examiner is incorrect in this regard as he acknowledges on page 3 of the September 29, 2005 office action. As seen in Fig. 6 of

Soultanian (shown below), the laminations are not hingedly secured by interlocking them with each other, and the laminations do not form a hinge. Additional parts are needed to hold the lamination in their proper places.

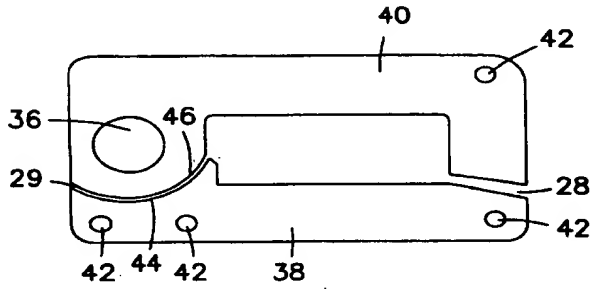
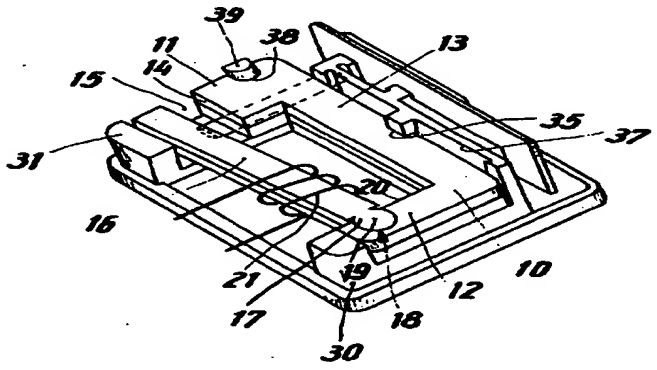


Fig. 6

The examiner relies of Pfenning for its disclosure of a relay having a hinge formed from laminations, as seen below, and concludes that it would have been obvious to have provided '092 with the hinge of Pfenning.



However, the examiner has not established *prima facie* obviousness with this combination, because Pfenning is not analogous art.

Pfenning is not analogous art because it describes a relay, not a vibrator motor. As seen in Section 2141.01(a) of the M.P.E.P., a reference must either be in the field of applicant's endeavor, or if not, then be reasonably pertinent to the particular problems with which the inventor was concerned. The Pfenning reference does not satisfy either criteria in this case.

A relay is not in the field of a vibrator motor. For one thing, vibrator motors are classified in U.S. 310 and relays are classified in U.S. 335.

A relay is unlike a motor because a relay does not drive a workload. It merely makes and breaks electrical contacts. In addition, a relay does not operate continuously like a motor, and it only operates in response to command signals. In contrast, a motor operates continuously whenever power is applied.

General technical similarities between an invention and a reference are insufficient. For example, in *In Re Clay*, 23 USPQ2d 1058 (Fed. Cir. 1992), a reference relating to extraction of crude petroleum from the ground was held to be non-analogous art to an application that related to storage of refined hydrocarbons. Thus, even though the reference and the application both involved hydrocarbon products such as refined and unrefined oil, the fields were different. Similarly, in the present case, the invention in Pfenning involves electromechanical products, but the relay in Pfenning is not in the field of

vibrator motors. For these reasons, Pfenning is not in the field of endeavor of the present invention.

The present invention eliminated the tail spring used in conventional vibrator motors, such as the tail spring 118 in U.S. Patent No. 5,787,587.

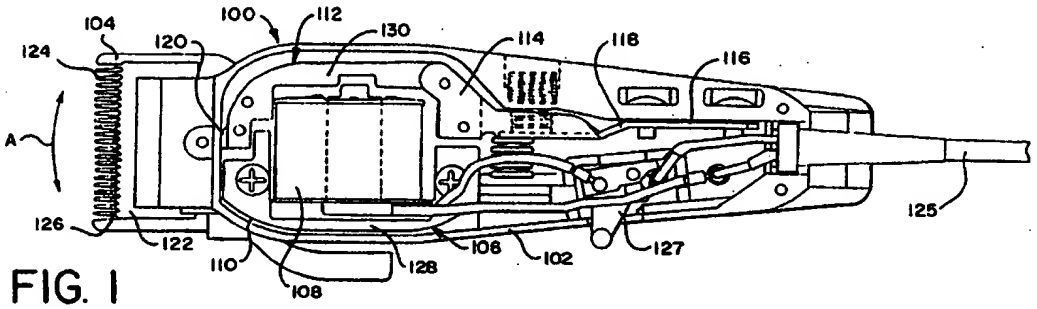


FIG. 1

The tail spring in a vibrator motor provides mechanical resonance as the motor continuously vibrates. Pfenning does not address or attempt to solve the problem of eliminating the tail spring in a vibrator motor, and is not pertinent to that problem. After all, relays do not vibrate continuously, and do not use mechanically resonating tail springs.

In *Clay*, *supra*, the reference described a gel similar to that used by the applicant. The problem solved by the reference related to sealing petroleum in underground reserves, and the patent application at issue used a similar gel to remove refined oil from the space between the bottom of a tank and the valve. The gel solved both problems because it was heavier than the oil and settled to the bottom of the reserve and the tank, respectively.

The court found that the reference was not reasonably pertinent to the problem, because a person having ordinary skill in the art would not reasonably have expected to solve the problem (in that case, dead volume in tanks for refined petroleum) by considering a reference dealing with another situation (plugging underground formation anomalies). In the present case, an inventor concerned with eliminating the tail spring of the vibrator motor would not look to the relay of Pfenning for a solution.

Structural similarities with respect to the solution (i.e., a hinge) are irrelevant. The focus is on the problem, not the solution. Accordingly, withdrawal of Pfenning is respectfully requested.

Claim 1 stands rejected under § 103 on the basis of Pfenning and Soultanian. The previous § 102 rejection (mailed June 3, 2005) based on Soultanian was overcome because Soultanian does not disclose (or suggest) the hinge defined in the present claims, which the examiner concedes (September 29, 2005 office action, page 3). Without Pfenning, the present § 103 rejection must fall.

Even with Pfenning, the rejection fails because there is no motivation or suggestion to combine the references. There is no suggestion that the tail bracket in a conventional vibrator motor, or the spacing member 48 in Soultanian, could be eliminated by adapting structure from the relay described in Pfenning.

Soultanian's motivation was not to eliminate the tail bracket, because Soultanian's design has not reduced the number of parts. Instead of just using one stamped

piece (as at 118 in the Wahl '587 patent), Soultanian has added additional parts 30,26,20 to make the device work.

Soultanian states in the summary of the invention (lines 47-58) that the device is intended to reduce "the number of adjustments required during the manufacturing process" and to reduce the amount of copper and lamination steel required. Soultanian does not describe the reduction of the number of parts as an object. This is in contrast to the present invention which eliminates the tail spring. Indeed, four rivets and a spring finger are also eliminated.

CONCLUSION

For the foregoing reasons, Applicants respectfully request the rejection of claims 1 and 17 and their related dependent claims be reversed, with instructions to allow this application.

Respectfully submitted,

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By

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January 12, 2007

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CLAIMS APPENDIX

1. A vibrator motor comprising:

a stationary piece having a plurality of laminations; and

a moving piece having a plurality of laminations, the moving piece being hingedly secured to the stationary piece by interlocking the moving piece laminations with the stationary piece laminations so that the moving piece laminations and stationary piece laminations form a hinge which secures the moving piece laminations to the stationary piece laminations.

2. The vibrator motor of claim 1, further comprising

an electrical coil; and

a movement control system connected to the stationary piece and the moving piece, the movement control system having at least one spring and at least one device for adjusting tension in the spring;

whereby the moving piece is moved by electromagnetic fields generated by the electrical coil.

3. The vibrator motor of claim 2 wherein the coil is on the stationary piece, the motor further comprising a driver on the moving piece for connection to a motor load.

4. The vibrator motor of claim 1 comprising a hinge holder having a first surface that retains the moving piece axially while still allowing the moving piece to rotate.

5. The vibrator motor of claim 4 wherein the hinge holder has a second surface that biases the moving piece radially while still allowing the moving piece to rotate.

6. The vibrator motor of claim 1 comprising a hinge holder having a surface that biases the moving piece radially while still allowing the moving piece to rotate.

7. The vibrator motor of claim 3 wherein the driver is crimped to the moving piece.

8. The vibrator motor of claim 2 wherein the stationary piece has a circular shape at a first end of the stationary piece, and the moving piece forms a circular shaped opening at a first end of the moving piece, the circular shaped end of the stationary piece fitting inside of the circular shaped opening of the moving piece.

9. The vibrator motor of claim 8 wherein the movement control system is located at a second end of the moving piece.

10. The vibrator motor of claim 2 wherein the movement control system includes a screw having screw threads and a head, the screw being adjustably threaded in an opening operatively connected to the stationary piece;

the screw passing freely through an opening operatively connected to the moving piece, the stationary piece opening being located on one side of the moving piece opening and the screw head being located on the other side of the moving piece opening,

the movement control system further comprising a first spring between the stationary piece and the moving piece, and a second spring between the moving piece and the screw head.

11. The vibrator motor of claim 1 comprising a coil bobbin on the stationary piece around which the coil is wound, the coil bobbin also having an extension to which the movement control system is connected.

12. The vibrator motor of claim 3 wherein the movement control system is connected to the driver of the moving piece.

13. The vibrator motor of claim 1 comprising a low friction insert between the stationary and moving pieces where the stationary and moving pieces are hinged.

14. The vibrator motor of claim 1 comprising at least one grease channel where the moving piece is hingedly secured to the stationary piece.

15. (Withdrawn) A holder for a hinge having an axis, the hinge including a stationary piece and a moving piece hingedly secured to the stationary piece, the holder comprising

a first surface that secures the stationary piece to a case or the like, the first surface not interfering with movement of the moving piece;

a second surface that retains the moving piece axially with respect to the stationary piece; and

a third surface that presses the moving piece radially with respect to the stationary piece.

16. (Withdrawn) A coil bobbin for a motor having a stationary piece, a moving piece and a movement control system, the bobbin comprising

a winding portion for wrapping wire around the bobbin, the winding portion having an internal opening through which the stationary piece can be inserted; and

an arm extending from the winding portion to which the movement control system can be connected.

17. A hair clipper comprising

a case having at least one attachment point for securing a motor;

a stationary blade on the case; and

a moving blade adjacent the stationary blade, the moving blade being adapted for reciprocation across the moving blade;

the motor being secured to the case at the attachment point, the motor including,

a stationary piece having a plurality of laminations and a coil,

a moving piece having a plurality of laminations, the moving piece being hinged to the stationary piece at one end by interlocking the moving piece laminations with the stationary piece laminations so that the moving piece laminations and stationary piece laminations form a hinge which secures the moving piece laminations to the stationary piece laminations,

a driver secured to the moving piece, the driver and the moving blade being coupled for movement of the moving blade; and

a movement control system connected to the stationary piece and the moving piece, the movement control system having at least one spring and at least one device for adjusting tension in the spring.

18. The hair clipper of claim 17 comprising a hinge holder having a first surface that retains the moving piece axially while still allowing the moving piece to rotate.

19. The hair clipper of claim 18 wherein the hinge holder has a second surface that biases the moving piece radially while still allowing the moving piece to rotate.

20. The hair clipper of claim 17 comprising a hinge holder having a surface that biases the moving piece radially while still allowing the moving piece to rotate.

21. The hair clipper of claim 17 comprising a coil bobbin on the stationary piece around which the coil is wound, the coil bobbin also having an extension to which the movement control system is connected.

22. (Withdrawn) A method for manufacturing a hair clipper comprising

molding a case having at least one motor attachment point ,

retaining a stationary blade on the case and locating a reciprocating blade adjacent the stationary blade,

assembling a motor having a driver; and

installing the assembled motor in the case and securing it at the attachment point, the driver causing the reciprocating blade to reciprocate when the motor is operated.

EVIDENCE APPENDIX

NONE

RELATED PROCEEDINGS APPENDIX

NONE